

L12 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2008:456004 CAPLUS <<LOGINID::20081215>>  
DOCUMENT NUMBER: 149:478276  
TITLE: Study of inclusion compounds of  $\beta$ -  
cyclodextrin with 3-formylchromones  
AUTHOR(S): Zhang, Ling-li; Cao, Ling-hua  
CORPORATE SOURCE: College of Chemistry and Chemical Engineering,  
Xinjiang University, Urumqi, 830046, Peop. Rep. China  
SOURCE: Xinjiang Daxue Xuebao, Ziran Kexueban (2007), 24(1),  
17-21  
CODEN: XDXZES; ISSN: 1000-2839  
PUBLISHER: Xinjiang Daxue Xuebao Bianjibu  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
AB Two Inclusion compds. of  $\beta$ - cyclodextrin with  
3-formylchromones were prepared and characterized by IR, <sup>1</sup>H NMR and UV. The  
solubility of 3-formylchromones was significantly improved after inclusion.  
Further more, the equilibrium-constant of the inclusion reaction was calculated by  
the data of phase solubility method.

L12 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2007:1145300 CAPLUS <<LOGINID::20081215>>  
DOCUMENT NUMBER: 147:432964  
TITLE: Oxidative hair dyes containing cyclodextins for  
reduced skin staining  
INVENTOR(S): Hoeffkes, Horst; Angenvoort, Ute; Oberkobusch, Doris;  
Gross, Wibke  
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany  
SOURCE: Ger. Offen., 31pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102006062437	A1	20071011	DE 2006-102006062437	20061227
PRIORITY APPLN. INFO.:			DE 2006-102006062437	20061227

OTHER SOURCE(S): MARPAT 147:432964  
AB The invention concerns oxidative hair dyes that are not applied with an  
oxidation agent and excel with reduced skin staining; the dyes include: (ia)  
a reactive carbonyl compound; (ib) a CH-acidic compound; (II) at least one  
cyclodextrin. Thus a hair dye cream (ia) component contained  
(weight/weight%): Stenol 1618 7.5; Kokoslorol C12-C18 2.5; Eumulgin B2 2.0;  
 $\alpha$ - cyclodextrin 5.0; 3,5-dimethoxy-4-hydroxybenzaldehyde  
0.50; 4-hydroxy-2-methoxybenzaldehyde 1.02; water to 100. Component (ib)  
included (weight/weight%): Stenol 1618 7.5; Kokoslorol C12-C18 2.5; Eumulgin B2  
2.0; 1,2-dihydro-1,3,4,6-tetramethyl-2-oxo-pyridinium hydrogen sulfate  
2.50; water to 100.

L12 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2006:893470 CAPLUS <<LOGINID::20081215>>  
DOCUMENT NUMBER: 146:148585  
TITLE: Influence of water-soluble additives on drug release  
kinetics from biodegradable poly(lactic-co-glycolic  
acid) matrix  
AUTHOR(S): Song, Liping; Yang, Jing; Wang, Hai; Sun, Hongfan;  
Tang, Lina; Wu, Li; Chang, Jin; Song, Cunxian  
CORPORATE SOURCE: The Institute of Biomedical Engineering, Chinese  
Academy of Medical Sciences, Tianjin, 300192, Peop.  
Rep. China  
SOURCE: Yaoxue Xuebao (2005), 40(6), 557-562  
CODEN: YHHPAL; ISSN: 0513-4870  
PUBLISHER: Yaoxue Xuebao Bianjibu  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
AB The effects of an array of additives on drug release from double-layered  
poly(lactic-co-glycolic acid) (PLGA) matrixes were studied. Additives  
differing in mol. size, hydrophilicity, and steric configuration were  
selected. An anti-proliferative 2-aminochromone, U-86,983

(U-86, Pharmacia and Upjohn), was used as a model agent. In vitro release of U-86 from PLGA matrixes without additive showed a typical biphasic release kinetics, i.e. a slow diffusion release (Phase I) followed by a fast erosion-mediated release. The water-soluble additives in PLGA matrixes changed the biphasic release pattern to a near monophasic profile by increasing the release rate of the Phase I. Increasing the ratio of additives to PLGA in matrixes caused a significant increase in the U-86 release rates. A high mol. weight water-soluble additive, Pluronic F127, induced the matrix to show perfect zero-order release kinetics. The morphol. evaluation of matrixes using SEM indicated that the water-soluble additives were leachable and thus generated a highly porous structure in the matrixes. Water-solubility, mol. size, and steric configuration of the additives are the important determinants in generating various types of pore structures in polymer matrix which in turn affect the release mechanism and release kinetics.

L12 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:361111 CAPLUS <<LOGINID::20081215>>

DOCUMENT NUMBER: 133:185384

TITLE: Dynamics of complexation of flavone and chromone to  $\beta$ - cyclodextrin

AUTHOR(S): Christoff, M.; Okano, L. T.; Bohne, C.

CORPORATE SOURCE: Department of Chemistry, University of Victoria, Victoria, BC, V8W 3V6, Can.

SOURCE: Journal of Photochemistry and Photobiology, A: Chemistry (2000), 134(3), 169-176  
CODEN: JPPCEJ; ISSN: 1010-6030

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The complexation dynamics of the excited triplet states of flavone and chromone with  $\beta$ - cyclodextrin was studied by laser flash photolysis. The exit and entry rate consts. for the triplet states of these ketones were determined using Cu<sup>2+</sup> and NO<sub>2</sub><sup>-</sup> as quenchers. The entry and exit rate consts. depend on the size of the guest mol. and were faster for chromone than for flavone.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:750774 CAPLUS <<LOGINID::20081215>>

DOCUMENT NUMBER: 126:135531

ORIGINAL REFERENCE NO.: 126:26127a,26130a

TITLE: Controlled release of U-86983 from double-layer biodegradable matrixes: effect of additives on release mechanism and kinetics

AUTHOR(S): Song, C. X.; Labhasetwar, V.; Levy, R. J.

CORPORATE SOURCE: Division of Pediatric Cardiology, Department of Pediatrics and Communicable Diseases, The University of Michigan Medical Center, Ann Arbor, MI, USA

SOURCE: Journal of Controlled Release (1997), 45(2), 177-192  
CODEN: JCREEC; ISSN: 0168-3659

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Effects of additives on the drug release kinetics from biodegradable matrixes is an important determinant in designing a drug delivery system. These expts. introduced the influence of an array of additives on the drug release from double-layered poly(lactic-co-glycolic acid) (PLGA) matrixes. Various additives such as L-tartaric acid di-Me ester (DMT), Pluronic F127 (F127); 2-hydroxypropyl  $\beta$ - cyclodextrin (HPB), di-Me  $\beta$ - cyclodextrin (MMB) and beeswax (Wax), differing in mol. size, hydrophilicity and steric configuration were selected for this study. An antiproliferative 2-aminochromone, U-86983, was used as a model agent because of the interest in investigating local drug delivery systems for the inhibition of restenosis. The in vitro release of U-86 from PLGA matrixes without additive showed a typical biphasic release kinetics, i.e. a slow diffusion release (Phase I) followed by a fast erosion-mediated release (Phase II). The water-soluble additives in PLGA matrixes changed the biphasic release pattern to a near monophasic profile by increasing the release rate of the Phase I. Increasing the ratio of additives to PLGA in matrixes causes a significant increase in the U-86 release rates. The

high mol. weight water-soluble additive, Pluronic F127, resulted in a matrix showing perfect zero-order release kinetics. The water-soluble cyclodextrin derivative, HPB, gave the highest release rate among all the matrixes formulated. A hydrophobic additive, beeswax, however showed biphasic release kinetics comparable to PLGA control matrixes, but delayed the onset of the Phase II by 4 days. The U-86 release profiles were in good agreement with the mass loss profiles of these matrixes except for the matrixes with F127 and HPB additives. The morphol. evaluation of matrixes using SEM indicates that the water-soluble additives are leachable and thus generate a highly porous structure in the matrixes. The matrix pore configuration (e.g. interconnected or closed) created with different additives determined the mechanism of drug release kinetics from the various matrix formulations. In conclusion, the feasibility of modulating release rates and kinetics of an agent from PLGA monolithic matrixes by utilizing various types of additives is demonstrated. Water-solubility, mol. size and steric configuration of the additives are the important determinants in generating various types of pore structures in polymer matrix which in turn affect the release mechanism and release kinetics.